# Mobilization and Management of Finance Course Quiz 3 Date: 16/2/2017 

Weightage 10\%

Name $\qquad$ Roll No.

## INSTRUCTIONS

1. Closed book exam. Answer all questions.
2. Students cannot use laptop. Students cannot bring their mobiles inside exam room.

You are not allowed to borrow books, papers, calculators, etc. ... writing junk would lead to negative marks/deduction of marks.
Anyone who resorts to unfair practices, as judged by the examiner, the minimum penalty will be zero in this segment of evaluation, while the maximum penalty could be expulsion from the institute. There will be no further warnings.

1. Internal Rate of Return Projects $A$ and $B$ have the following cash flows:

| Year | Project A | Project B |
| :---: | :---: | :---: |
| 0 | $\$ 1,000$ | $\$ 2,000$ |
| 1 | C1A | C1B |
| 2 | C2A | C2B |
| 3 | C3B | C3B |

a) If the cash flows from the projects are identical, which of the two projects would have a higher IRR? Why?
b) If C1B $=2 \mathrm{C} 1 \mathrm{~A}, \mathrm{C} 2 \mathrm{~B}=2 \mathrm{C} 2 \mathrm{~A}$, and $\mathrm{C} 3 \mathrm{~B}=2 \mathrm{C} 3 \mathrm{~A}$, then is $\mathrm{IRR}_{A}=\mathrm{IRR}_{B}$
2. Risk Premiums Is it possible for the risk premium to be negative before an investment is undertaken? Can the risk premium be negative after the fact? Explain.
(1 Marks)
3. Calculating Flotation Costs Southern Alliance Company needs to raise $\$ 55$ million to start a new project and will raise the money by selling new bonds. The company will generate no internal equity for the foreseeable future. The company has a target capital structure of 65 percent common stock, 5 percent preferred stock, and 30 percent debt. Flotation costs for issuing new common stock are 8 percent, for new preferred stock, 5 percent, and for new debt, 3 percent. What is the true initial cost figure Southern should use when evaluating its project?
(1 Marks)
4. Calculating Returns You purchased a zero coupon bond one year ago for $\$ 109.83$. The market interest rate is now 9 percent. If the bond had 25 years to maturity when you originally purchased it, what was your total return for the past year?
5. Sensitivity Analysis Consider a four-year project with the following information: Initial fixed asset investment $=\$ 480,000$; straight-line depreciation to zero over the four-year life; zero
salvage value; price $=\$ 37$; variable costs $5 \$ 23$; fixed costs $=\$ 195,000$; quantity sold $=90,000$ units; tax rate $=34$ percent. How sensitive is OCF to changes in quantity sold?
(2 Marks)
6. Calculating the Cost of Equity Floyd Industries stock has a beta of 1.3. The company just paid a dividend of $\$ .95$, and the dividends are expected to grow at 4.5 percent per year. The expected return on the market is 11 percent, and Treasury bills are yielding 4.3 percent. The most recent stock price for Floyd is $\$ 64$.
a) Calculate the cost of equity using the DDM method and SML method.
b) Why do you think your estimates in (a) and (b) are so different?
(2 Marks)

